

WHAT IS CLAIMED IS:

1. A side-emission type semiconductor light-emitting device, comprising:
a substrate formed with an electrode;
an LED chip bonded onto said electrode; and
5 a transparent or translucent resin with which said LED chip is molded, wherein
said transparent or translucent resin has a light-emitting surface formed by a
roughened surface being perpendicular to said substrate.
2. A side-emission type semiconductor light-emitting device according to claim 1,
wherein said light-emitting surface is formed by dicing.
- 10 3. A manufacturing method of a side-emission type semiconductor light-emitting
device, comprising the following steps of:
(a) mounting two reflectors having openings opposed with each other on a
substrate mounted with an LED chip;
(b) injecting a transparent or translucent resin at an opposing portion of said
15 openings; and
(c) dicing said transparent or translucent resin being hardened and said substrate at
said opposing portion.
4. A side-emission type semiconductor light-emitting device, comprising:
a substrate formed with an electrode;
20 an LED chip bonded onto said substrate;
a transparent or translucent resin with which said LED chip is molded; and
a reflector which reflects a light emitted from said LED chip, wherein
said transparent or translucent resin has a convex portion, and said reflector has a
concave portion to be fitted into said convex portion.
- 25 5. A side-emission type semiconductor light-emitting device according to claim 4,

wherein said concave portion is a throughhole having a diameter which becomes larger from one main surface to other main surface of said reflector.

5 6. A side-emission type semiconductor light-emitting device according to claim 5, wherein said one main surface is a surface brought into contact with said transparent or translucent resin, and said other main surface is a surface exposed to outside.

7. A side-emission type semiconductor light-emitting device according to any one of claims 4 to 6, wherein said LED chip has a bonding wire extending from a top surface, and said concave portion is formed directly above said LED chip.

10 8. A manufacturing method of a side-emission type semiconductor light-emitting device, comprising the following steps of:

(a) mounting a reflector formed with a concave portion on a substrate;

(b) removing an organic matter adhering to a surface, including an inner surface of said concave portion, of said reflector; and

15 (c) injecting a transparent or translucent resin between said reflector and said substrate up to said concave portion.

9. A manufacturing method of a side-emission type semiconductor light-emitting device according to claim 8, wherein said reflector is subjected to UV cleaning in the step (b).

20 10. A side-emission type semiconductor light-emitting device, comprising:
a substrate formed with an electrode; and
an LED chip which is bonded onto said electrode by a bonding paste, wherein
said LED chip has a transparent or translucent base and a light-emitting layer
formed thereon, and is mounted on a position deviated from an application position of
25 said bonding paste to a light emitting surface side.

11. A side-emission type semiconductor light-emitting device according to claim 10, wherein said electrode includes an application area having a center deviated from a mounted position of said LED chip to an opposite direction of said light-emitting surface.

5 12. A side-emission type semiconductor light-emitting device according to claim 11, wherein said electrode further includes an auxiliary area formed closer to said light-emitting surface side than said application area and a narrow connecting portion connecting said application area and said auxiliary area.

10 13. A side-emission type semiconductor light-emitting device according to claim 11 or 12, wherein a center of said application area is deviated from a center of said substrate to said opposite direction.

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